

PATENT COOPERATION TREATY

PCT

INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY
(Chapter II of the Patent Cooperation Treaty)

(PCT Article 36 and Rule 70)

Translation

Applicant's or agent's file reference PCT01-03037	FOR FURTHER ACTION See Form PCT/IPEA/416	
International application No. PCT/JP2003/013615	International filing date (day/month/year) 24 October 2003 (24.10.2003)	Priority date (day/month/year) 30 October 2002 (30.10.2002)
International Patent Classification (IPC) or national classification and IPC H01L 29/786, 51/00, 21/28, 27/092, H05B 33/14, 33/26		
Applicant PIONEER CORPORATION		

1. This report is the international preliminary examination report, established by this International Preliminary Examining Authority under Article 35 and transmitted to the applicant according to Article 36.	
2. This REPORT consists of a total of <u>4</u> sheets, including this cover sheet.	
3. This report is also accompanied by ANNEXES, comprising:	
a. <input type="checkbox"/>	(sent to the applicant and to the International Bureau) a total of _____ sheets, as follows:
<input type="checkbox"/>	sheets of the description, claims and/or drawings which have been amended and are the basis of this report and/or sheets containing rectifications authorized by this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions).
<input type="checkbox"/>	sheets which supersede earlier sheets, but which this Authority considers contain an amendment that goes beyond the disclosure in the international application as filed, as indicated in item 4 of Box No. I and the Supplemental Box.
b. <input type="checkbox"/>	(sent to the International Bureau only) a total of (indicate type and number of electronic carrier(s)) _____, containing a sequence listing and/or tables related thereto, in computer readable form only, as indicated in the Supplemental Box Relating to Sequence Listing (see Section 802 of the Administrative Instructions).
4. This report contains indications relating to the following items:	
<input checked="" type="checkbox"/>	Box No. I Basis of the report
<input type="checkbox"/>	Box No. II Priority
<input type="checkbox"/>	Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
<input type="checkbox"/>	Box No. IV Lack of unity of invention
<input checked="" type="checkbox"/>	Box No. V Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
<input type="checkbox"/>	Box No. VI Certain documents cited
<input type="checkbox"/>	Box No. VII Certain defects in the international application
<input type="checkbox"/>	Box No. VIII Certain observations on the international application

Date of submission of the demand 24 May 2004 (24.05.2004)	Date of completion of this report 06 October 2004 (06.10.2004)
Name and mailing address of the IPEA/JP	Authorized officer
Facsimile No.	Telephone No.

INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

International application No.

PCT/JP2003/013615

Box No. I Basis of the report

1. With regard to the language, this report is based on the international application in the language in which it was filed, unless otherwise indicated under this item.

- ☐ This report is based on translations from the original language into the following language _____, which is language of a translation furnished for the purpose of:
- ☐ international search (under Rules 12.3 and 23.1(b))
 - ☐ publication of the international application (under Rule 12.4)
 - ☐ international preliminary examination (under Rules 55.2 and/or 55.3)

2. With regard to the elements of the international application, this report is based on *(replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report)*:

- ☒ The international application as originally filed/furnished
- ☐ the description:
- pages _____, as originally filed/furnished
- pages* _____ received by this Authority on _____
- pages* _____ received by this Authority on _____
- ☐ the claims:
- pages _____, as originally filed/furnished
- pages* _____, as amended (together with any statement) under Article 19
- pages* _____ received by this Authority on _____
- pages* _____ received by this Authority on _____
- ☐ the drawings:
- pages _____, as originally filed/furnished
- pages* _____ received by this Authority on _____
- pages* _____ received by this Authority on _____
- ☐ a sequence listing and/or any related table(s) – see Supplemental Box Relating to Sequence Listing.

3. ☐ The amendments have resulted in the cancellation of:

- ☐ the description, pages _____
- ☐ the claims, Nos. _____
- ☐ the drawings, sheets/figs _____
- ☐ the sequence listing (*specify*): _____
- ☐ any table(s) related to sequence listing (*specify*): _____

4. ☐ This report has been established as if (some of) the amendments annexed to this report and listed below had not been made, since they have been considered to go beyond the disclosure as filed, as indicated in the Supplemental Box (Rule 70.2(c)).

- ☐ the description, pages _____
- ☐ the claims, Nos. _____
- ☐ the drawings, sheets/figs _____
- ☐ the sequence listing (*specify*): _____
- ☐ any table(s) related to sequence listing (*specify*): _____

* If item 4 applies, some or all of those sheets may be marked "superseded."

INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

International application No.

PCT/JP03/13615

Box No. V Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. Statement

Novelty (N)	Claims	1-8	YES
	Claims		NO
Inventive step (IS)	Claims		YES
	Claims	1-8	NO
Industrial applicability (IA)	Claims	1-8	YES
	Claims		NO

2. Citations and explanations (Rule 70.7)

- Document 1: JP, 2001-177109, A
(Lucent Technologies Inc.)
June 29, 2001 (06.29.01), Full text, Figs. 1-25
- Document 2: JP, 2001-203364, A
(Lucent Technologies Inc.)
July 27, 2001 (07.27.01), Full text, Figs. 1-22
- Document 3: JP, 8-116060, A (Frontec Corp.)
May 7, 1996 (05.07.96), Full text, Figs. 1-18
- Document 4: JP, 2003-505889, A (Eink Corp.)
February 12, 2003, Full text, Figs. 1-4
- Document 5: JP, 6-89905, A (K.K. Handotai Energy Kenkyusho)
March 29, 1994 (03.29.94), Paragraph 29, Fig. 1
& KR, 9710652, B1
- Document 6: JP, 2000-124462, A (Seiko Epson Corporation)
April 28, 2000 (04.28.00), Paragraphs 75-105, Figs. 14-16 (Family: none)
- Document 7: JP, 4-86891, A (Fuji Xerox Co., Ltd.)
March 19, 1992 (03.19.92), Full text, Figs. 1-3 (Family: none)

Regarding claims 1-4

The inventions described in claims 1-4 do not appear to involve an inventive step based on documents 1-3 cited in the ISR.

Documents 1-2 describe an organic semiconductor device with a CMOS configuration, wherein an organic semiconductor layer is formed in a channel region.

Document 3 describes a semiconductor device with a CMOS configuration using a material having a high work function for a source electrode and a drain electrode of a P-type transistor, and using a material having a small work function for a source electrode and a drain electrode of an N-type transistor.

Regarding claim 5

The invention described in claim 5 does not appear to involve an inventive step based on documents 1-3 cited in the ISR and newly cited document 5.

Document 5 describes an aluminum wiring (124) that serves as a drain electrode of a P-type transistor being connected to a source electrode (120) of an N-type transistor.

Supplemental Box

In case the space in any of the preceding boxes is not sufficient.
Continuation of Box V:

Regarding claim 6

The invention described in claim 6 does not appear to involve an inventive step based on documents 1-3 cited in the ISR and newly cited document 6.

Document 6 describes connecting a drain electrode of a P-type transistor and a source electrode of an N-type transistor by wiring.

Regarding claim 7

The invention described in claim 7 does not appear to involve an inventive step based on documents 1-4 cited in the ISR.

Document 4 describes using a conductive paste for a gate electrode.

Regarding claim 8

The invention described in claim 8 does not appear to involve an inventive step based on documents 1-3 cited in the ISR and newly cited document 7.

Document 7 describes an electrode connected to a drain electrode being connected to an organic electroluminescence display.